## In the claims:

Please amend claims 1, 5, 6 and 21-23 as shown below.

(Amended) A remote tire mortitor system comprising:

a plurality of tire monitors associated with wheels of a vehicle, each wheel including a fire having a previously determined characteristic frequency response, each tire monitor including a transmitter configured to transmit tire data at a transmission frequency chosen in relation to the characteristic frequency response of the tire; and

a receiver configured to receive the tire data.

5. (Amended) A tire monitor mountable inside a tire, the tire monitor comprising:

a tire data sensor; and

a transmitter configured to transmit tire data at one or more transmission frequencies chosen to be within a previously identified passband of frequencies of the tire.

6. (Amended) The tire monitor of claim 5 wherein the tire has a previously determined characteristic frequency response including one or more identified attenuation bands and one or more identified passbands, the characteristic frequency response related to the structure of the tire, the transmission frequency chosen to be in the one or more identified passbands.

21. (Amended) A remote tire monitor system for a vehicle having a plurality of wheels, the remote tire monitor system comprising:

one or more tire monitors, each respective tire monitor being associated with a tire of a respective wheel of the vehicle the tire having a previously determined characteristic frequency response to electromagnetic energy imparted on the tire, each respective tire monitor including

a respective tire data sensor, and

a respective radio transmitter coupled with the tire data sensor and configured to transmit electromagnetic energy to convey tire data, the respective radio transmitter transmitting the electromagnetic energy at one or more

transmission frequencies chosen in relation to the characteristic frequency response of the tire; and

a receiver configured to detect the transmitted electromagnetic energy.

- 22. (Amended) The remote tire monitor system of claim 21 wherein the respective radio transmitter transmits the electromagnetic energy at transmission frequencies chosen to be in a previously identified passband of the characteristic frequency response of the tire.
- 23. (Amended) A tire monitor mountable inside a tire of a vehicle, the tire monitor comprising:

a tire data sensor to produce data indicative of a tire condition; and

a transmit circuit coupled with the tire data sensor to transmit tire data at one or more transmission frequencies chosen to be within a previously identified passband of frequencies of a previously determined characteristic frequency response to electromagnetic energy imparted on the tire.